argumentum in circulo. I wrote this to Professor Edwards and he wrote in answer what clearly seemed an explicit acknowledgment of it. But it was so unlike a paradoxer to acknowledge a fallacy, that in wonder I wrote again, "You mean to state that in your proof of the theorem §16 of your book, you do assume (without stating the assumption) your Exercise 1 under your §17. Am I right in this understanding of your letter?" And strange as it may seem he wrote March 7th, 1896, "You are practically right in your understanding of my letter of February 22nd."

I have given three different exposures of Playfair's fallacy in the fourth edition of my Bolyai pp. 65—71.

THEORY AND PRACTICE COMBINED.

BY WARREN HOLDEN, GIRARD COLLEGE, PHILADELPHIA, PENNSYLVANIA.

Common experience, applied to Mechanical and Engineering problems, has always been in harmony with the principles of Euclidean Geometry. With the overthrow of these principles we might expect chaos to come again. And if Mathematics has not yet demonstrated all of these principles, so much the worse for Mathematics. Let its Professors try again. Their failure in any particular case does not establish the opposite.

Abstract studies in Philosophy, unmodified and unillustrated by human experience, have often led to bewildering vagaries. Does not a similar fate, from corresponding causes, impend over Non-Euclidean Geometry? Theory and practice should go hand in hand.

All mathematical instruments in use, whether in the department of Mechanics, Physics or Engineering, are constructed upon the basis of Euclidean Geometry. Where are the instruments of precision which serve to illustrate and apply the principles of Non-Euclidean Geometry?

QUERIES.

1. Please give me address of publishing house that publishes the most reliable works on How to Calculate Timber on the Stump, also names of most reliable works on same.

JOHN BRIDGES.

EDITORIALS.

Prof. C. A. Waldo is now Professor of Mathematics in Purdue University, Lafayette, Indiana.

Science, March 27, contains an able article, The Essence of Number, by Dr. George Bruce Halsted.

Prof. J. A. Calderhead has been elected Professor of Mathematics in the Curry University, Pittsburg, Pennsylvania.

Dr. Byerly's Fourier's Series and Spherical Harmonics, we are informed by the Publishers, is gaining an international reputation.

Dr. E. H. Moore has been promoted to Head Professor of Mathematics in the University of Chicago. This is a merited recognition.

Professor J. J. Sylvester, formerly of the Johns Hopkins University, has just been made a Foreign Member of the Turin Royal Academy of Science.

Our subscribers will do us a kindness by sending us the names of persons who are likely to subscribe for the MONTHLY, as we would be pleased to send such persons sample copies.

A few of our former subscribers who are in arrears have asked us to discontinue the MONTHLY to their address. In no case will we discontinue to send the MONTHLY until the amount due us is paid.

Mr. W. J. C. Miller, who is editor of the Mathematical Department of the *Educational Times*, London, England, says, "THE AMERICAN MATHEMATICAL MONTHLY is one of the best magazines that I receive." Mr. Miller has edited the Mathematical Department of the *Educational Times* for over 30 years.

M. A. Gruber, of Washington, D. C., writes: You will please find enclosed a Money Order of $3.00 as my subscription to THE AMERICAN MATHEMATICAL MONTHLY for 1896. It is a magazine worthy of long life; if the additional mite is any assistance in putting it upon a paying basis, I shall always remain among your best friends.

We have on hand a few bound copies of Volumes I and II which we will sell at $2.75 each. By special arrangements with the binders we can have volumes of the MONTHLY bound for 75 cents. If any of our subscribers wish to avail themselves of this opportunity to have their volumes of the MONTHLY bound, they may send them to B. F. Finkel, Springfield, Mo.

Philadelphia Summer Meeting will hold its fourth session, July 6—31, 1896, in the buildings of the University of Pennsylvania, under the auspices of the American Society for the Extension of University Teaching. Department E —Mathematics: I. Methods of Teaching Mathematics; II. Plane and Solid Geometry; III. Algebra (Elementary Course); IV. Algebra (Advanced Course); V. Trigonometry; VI. Analytical Geometry; VII. Differential and Integral Calculus; VIII. Theory of Equations and Determinants; IX. Differential Equations; X. Theory of Functions.

The lecturers are I. J. Schwatt, Ph. D., and G. H. Hallett, M. A., of the University of Pennsylvania. On Wednesday evening, July 8, Dr. Schwatt will deliver to the students of all departments of the Summer Meeting an address on the Philosophy and Utility of the Calculus.

We are sorry to announce the death of one of our valued contributors, T. P. Stowell, of Rochester, N. Y., which occurred February 29th, 1896. Mr.

Stowell's name has been closely associated with nearly all the mathematical journals published in this country within the last fifty years. The following sketch is taken from *The Union and Advertiser*, Rochester, New York:

Thomas P. Stowell, of No. 29 Atkinson street, died Saturday at the home of the family, aged 77 years. Mr. Stowell, who had resided in the city since April 1, 1864, at the residence now occupied by the family, was born September 5, 1819, and was widely known, respected and esteemed, not only in Rochester but throughout the entire country. He graduated from the well-known Hallowell University of Virginia, and was considered one of the ablest mathematicians in the United States. He retired from business in 1895, in the enjoyment of robust health, having apparently the strength and certainly the appearance of a middle-aged man.

Mr. Stowell had been a member of St. Luke's Church during the entire period of his residence in Rochester. He leaves a wife and five children, Miss Anna Stowell, Miss M. Louise Stowell, Dr. Henry F. Stowell, and C. L. Stowell, all of this city, and Charles F. Stowell of Albany.

BOOKS AND PERIODICALS.

Syllabus of Geometry. By G. A. Wentworth, A. M., Author of a Series of Text-books in Mathematics. Pamphlet form. 50 pages. Boston and Chicago: Ginn & Co.

This pamphlet contains the enunciations of the propositions and corollaries of the author's text-book in Geometry, numbered as they are in the text-book. B. F. F.

Rational Mathematics. By Charles De Medici.

Under the above title the author is publishing a work—The New Geometry and Commensurational Arithmetic—which is divided into three sections: A, B, C. In Section A, Part I, the first principles and primary elements of Geometry are taught; Part II. First principles of Commensuration, founded on the Natural Division and Inherent Dimensions of Geometric Elements are taught; Part III. Classification of Geometric Figures and Forms. Section B, Geometry Study and Practice. The work is published by A. Lovell & Co., New York. B. F. F.

Elementary Treatise on Electricity and Magnetism Founded on Joubert's Traité Élémentaire D'Éléctricité. By G. C. Foster, F. R. S., Quain Professor of Physics in University College, London, and E. Atkinson, Ph. D., formerly Professor of Experimental Science in the Staff College. 8vo. Cloth, 552 pp. Introduction price, $1.80. New York: Longmans, Green & Co.

This treatise on Electricity and Magnetism is confined to facts, hypotheses being studiously avoided. The treatment of each subject is clear, simple, direct, and exhaustive. Whenever necessary, the higher mathematics are used in compututions and the establishment of electrical laws. It is the best treatise on Electricity and Magnetism that we have yet seen and we heartily commend it to any person desiring a good work on these important subjects. B. F. F.